



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

[Handwritten signature]

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/644,025	08/20/2003	Shun-Chen Chang	0941-0830P	6304

2292 7590 07/28/2004

BIRCH STEWART KOLASCH & BIRCH
PO BOX 747
FALLS CHURCH, VA 22040-0747

EXAMINER

WHITE, DWAYNE J

ART UNIT PAPER NUMBER

3745

DATE MAILED: 07/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/644,025

Applicant(s)

CHANG, SHUN-CHEN

Examiner

Dwayne J White

Art Unit

3745

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☒ Certified copies of the priority documents have been received in Application No. 10/060,299.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>8/20/03</u> . | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 3745

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 8 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Specifically, claim 8 recites the guard blades having a cross-sectional shape with a linear central line and either a curve or an arc line. It is not clear how the blade can have both a linear central line and a curve or arc at the same time. Clarification is required.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1 and 5 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,663,342. Although the conflicting claims are not identical, they are not patentably distinct from each other. Claim 1 of

Claims 1 and 5 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,663,342. Although the conflicting claims are not identical, they are not patentably distinct from each other. Claim 1 of the patent "anticipates" application claims 1 and 5. Accordingly, claims 1 and 5 are not patentably distinct from patent claim 1. Here, patent claim 1 requires a fan guard adapted to be used with at least one heat-dissipating device with a plurality of rotor blades for supercharging an airflow discharging from said heat-dissipating device, comprising: a frame; and a set of guard blades arranged inside and fixed onto an inner surface of said frame, wherein said guard blades are arranged relative to said rotor blades to supercharge an airflow out of said heat-dissipating device; wherein said fan guard is disposed on a system frame in which said heat dissipating device is disposed, an said fan guard is integrally formed with said system frame.

Application claim 1 only requires a fan guard adapted to be used with at least one heat-dissipating device with a plurality of rotor blades for supercharging an airflow discharging from said heat-dissipating device, comprising: a frame; and a set of guard blades arranged inside and fixed onto an inner surface of said frame, wherein said guard blades are arranged relative to said rotor blades to supercharge an airflow out of said heat-dissipating device.

Application claim 5 only requires said fan guard being disposed on the system frame in which said heat-dissipating device is disposed.

Thus it is apparent that the more specific patent claim 7 encompasses application claims 1 and 5. Following the rationale in *In re Goodman* cited in the preceding paragraph, where applicant has once been granted a patent containing a claim for the generic or broader invention without first submitting an appropriate terminal disclaimer. Note that since Applicant claims 1

Art Unit: 3745

and 5 are anticipated by Patent claim 1 and since anticipation is the epitome of obviousness the Application claims 1 and 5 are obvious over Patent claim 1.

Claim 15 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 8 of U.S. Patent No. 6,663,342. Although the conflicting claims are not identical, they are not patentably distinct from each other. Claim 8 of the patent "anticipates" application claim 15. Accordingly, application claim 15 is not patentably distinct from patent claim 8. Here, patent claim 8 requires a composite heat-dissipating system comprising: at least one fan guard respectively having a frame and a set of guard blades arranged inside said frame and fixed onto an inner surface of said frame; and at least one heat-dissipating device respectively having a first rotor device with a plurality of rotor blades; wherein said guard blades are arranged relative to said rotor blades of said at least one heat-dissipating device to supercharge an airflow out of said at least one heat-dissipating device; and said at least one fan guard and said at least one heat-dissipating device are connected in series.

Application claim 15 only requires A composite heat-dissipating system comprising: at least one fan guard respectively having a frame and a set of guard blades arranged inside said frame and fixed onto an inner surface of said frame; and at least one heat-dissipating device respectively having a first rotor device with a plurality of rotor blades; wherein said guard blades are arranged relative to said rotor blades of said at least one heat-dissipating device to supercharge an airflow out of said at least one heat-dissipating device.

Thus it is apparent that the more specific patent claim 8 encompasses application claim 15. Following the rationale in *In re Goodman* cited in the preceding paragraph, where applicant

Art Unit: 3745

has once been granted a patent containing a claim for the generic or broader invention without first submitting an appropriate terminal disclaimer. Note that since Applicant claim 15 are anticipated by Patent claim 8 and since anticipation is the epitome of obviousness the Application claim 15 are obvious over Patent claim 8.

Claim 16 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 10 of U.S. Patent No. 6,663,342. Although the conflicting claims are not identical, they are not patentably distinct from each other. Claim 10 of the patent "anticipates" application claim 16. Accordingly, application claim 16 is not patentably distinct from patent claim 16. Here, patent claim 16 requires a composite heat-dissipating system comprising: at least one fan guard respectively having a frame and a set of guard blades arranged inside said frame and fixed onto an inner surface of said frame; and at least one heat-dissipating device respectively having a first rotor device with a plurality of rotor blades; wherein said guard blades are arranged relative to said rotor blades of said at least one heat-dissipating device to supercharge an airflow out of said at least one heat-dissipating device; and said at least one fan guard and said at least one heat-dissipating device are connected in series; wherein each of said guard blades has a shape substantially similar to those of said rotor blades of said at least one heat-dissipating device.

Application claim 16 only requires A composite heat-dissipating system comprising: at least one fan guard respectively having a frame and a set of guard blades arranged inside said frame and fixed onto an inner surface of said frame; and at least one heat-dissipating device respectively having a first rotor device with a plurality of rotor blades; wherein said guard blades are arranged relative to said rotor blades of said at least one heat-dissipating device to

Art Unit: 3745

supercharge an airflow out of said at least one heat-dissipating device; wherein each of said guard blades has a shape substantially similar to those of said rotor blades of said at least one heat-dissipating device..

Thus it is apparent that the more specific patent claim 10 encompasses application claim 16. Following the rationale in *In re Goodman* cited in the preceding paragraph, where applicant has once been granted a patent containing a claim for the generic or broader invention without first submitting an appropriate terminal disclaimer. Note that since Applicant claim 16 are anticipated by Patent claim 10 and since anticipation is the epitome of obviousness the Application claim 16 are obvious over Patent claim 10.

Claim 17 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 11 of U.S. Patent No. 6,663,342. Although the conflicting claims are not identical, they are not patentably distinct from each other. Claim 11 of the patent "anticipates" application claim 17. Accordingly, application claim 17 is not patentably distinct from patent claim 11. Here, patent claim 11 requires a composite heat-dissipating system comprising: at least one fan guard respectively having a frame and a set of guard blades arranged inside said frame and fixed onto an inner surface of said frame; and at least one heat-dissipating device respectively having a first rotor device with a plurality of rotor blades; wherein said guard blades are arranged relative to said rotor blades of said at least one heat-dissipating device to supercharge an airflow out of said at least one heat-dissipating device; and said at least one fan guard and said at least one heat-dissipating device are connected in series; wherein said frame of said fan guard and a main frame of said at least one heat-dissipating device are integrally formed together.

Art Unit: 3745

Application claim 17 only requires A composite heat-dissipating system comprising: at least one fan guard respectively having a frame and a set of guard blades arranged inside said frame and fixed onto an inner surface of said frame; and at least one heat-dissipating device respectively having a first rotor device with a plurality of rotor blades; wherein said guard blades are arranged relative to said rotor blades of said at least one heat-dissipating device to supercharge an airflow out of said at least one heat-dissipating device; wherein said frame of said fan guard and a main frame of said at least one heat-dissipating device are integrally formed together.

Thus it is apparent that the more specific patent claim 11 encompasses application claim 17. Following the rationale in *In re Goodman* cited in the preceding paragraph, where applicant has once been granted a patent containing a claim for the generic or broader invention without first submitting an appropriate terminal disclaimer. Note that since Applicant claim 17 are anticipated by Patent claim 11 and since anticipation is the epitome of obviousness the Application claim 17 are obvious over Patent claim 11.

Claim 18 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 12 of U.S. Patent No. 6,663,342. Although the conflicting claims are not identical, they are not patentably distinct from each other. Claim 12 of the patent "anticipates" application claim 18. Accordingly, application claim 18 is not patentably distinct from patent claim 12. Here, patent claim 12 requires a composite heat-dissipating system comprising: at least one fan guard respectively having a frame and a set of guard blades arranged inside said frame and fixed onto an inner surface of said frame; and at least one heat-dissipating device respectively having a first rotor device with a plurality of rotor

Art Unit: 3745

blades; wherein said guard blades are arranged relative to said rotor blades of said at least one heat-dissipating device to supercharge an airflow out of said at least one heat-dissipating device; and said at least one fan guard and said at least one heat-dissipating device are connected in series; wherein said at least one fan guard is arranged upstream of said rotor blades of said at least one heat-dissipating device.

Application claim 18 only requires A composite heat-dissipating system comprising: at least one fan guard respectively having a frame and a set of guard blades arranged inside said frame and fixed onto an inner surface of said frame; and at least one heat-dissipating device respectively having a first rotor device with a plurality of rotor blades; wherein said guard blades are arranged relative to said rotor blades of said at least one heat-dissipating device to supercharge an airflow out of said at least one heat-dissipating device; wherein said at least one fan guard is arranged upstream of said rotor blades of said at least one heat-dissipating device.

Thus it is apparent that the more specific patent claim 12 encompasses application claim 18. Following the rationale in *In re Goodman* cited in the preceding paragraph, where applicant has once been granted a patent containing a claim for the generic or broader invention without first submitting an appropriate terminal disclaimer. Note that since Applicant claim 18 are anticipated by Patent claim 12 and since anticipation is the epitome of obviousness the Application claim 18 are obvious over Patent claim 12.

Claim 19 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 13 of U.S. Patent No. 6,663,342. Although the conflicting claims are not identical, they are not patentably distinct from each other. Claim 13 of the patent "anticipates" application claim 19. Accordingly, application claim 19 is not

Art Unit: 3745

patentably distinct from patent claim 13. Here, patent claim 13 requires a composite heat-dissipating system comprising: at least one fan guard respectively having a frame and a set of guard blades arranged inside said frame and fixed onto an inner surface of said frame; and at least one heat-dissipating device respectively having a first rotor device with a plurality of rotor blades; wherein said guard blades are arranged relative to said rotor blades of said at least one heat-dissipating device to supercharge an airflow out of said at least one heat-dissipating device; and said at least one fan guard and said at least one heat-dissipating device are connected in series; wherein said at least one fan guard is arranged downstream of said rotor blades of said at least one heat-dissipating device.

Application claim 19 only requires A composite heat-dissipating system comprising: at least one fan guard respectively having a frame and a set of guard blades arranged inside said frame and fixed onto an inner surface of said frame; and at least one heat-dissipating device respectively having a first rotor device with a plurality of rotor blades; wherein said guard blades are arranged relative to said rotor blades of said at least one heat-dissipating device to supercharge an airflow out of said at least one heat-dissipating device; wherein said at least one fan guard is arranged downstream of said rotor blades of said at least one heat-dissipating device.

Thus it is apparent that the more specific patent claim 13 encompasses application claim 19. Following the rationale in *In re Goodman* cited in the preceding paragraph, where applicant has once been granted a patent containing a claim for the generic or broader invention without first submitting an appropriate terminal disclaimer. Note that since Applicant claim 19 are anticipated by Patent claim 13 and since anticipation is the epitome of obviousness the Application claim 19 are obvious over Patent claim 13.

Art Unit: 3745

Claim 20 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 14 of U.S. Patent No. 6,663,342. Although the conflicting claims are not identical, they are not patentably distinct from each other. Claim 14 of the patent "anticipates" application claim 20. Accordingly, application claim 20 is not patentably distinct from patent claim 14. Here, patent claim 14 requires a composite heat-dissipating system comprising: at least one fan guard respectively having a frame and a set of guard blades arranged inside said frame and fixed onto an inner surface of said frame; and at least one heat-dissipating device respectively having a first rotor device with a plurality of rotor blades; wherein said guard blades are arranged relative to said rotor blades of said at least one heat-dissipating device to supercharge an airflow out of said at least one heat-dissipating device; and said at least one fan guard and said at least one heat-dissipating device are connected in series; wherein said at least one fan guard is arranged between any two of said at least one heat-dissipating device.

Application claim 20 only requires A composite heat-dissipating system comprising: at least one fan guard respectively having a frame and a set of guard blades arranged inside said frame and fixed onto an inner surface of said frame; and at least one heat-dissipating device respectively having a first rotor device with a plurality of rotor blades; wherein said guard blades are arranged relative to said rotor blades of said at least one heat-dissipating device to supercharge an airflow out of said at least one heat-dissipating device; wherein said at least one fan guard is arranged between any two of said at least one heat-dissipating device.

Thus it is apparent that the more specific patent claim 14 encompasses application claim 20. Following the rationale in *In re Goodman* cited in the preceding paragraph, where applicant

Art Unit: 3745

has once been granted a patent containing a claim for the generic or broader invention without first submitting an appropriate terminal disclaimer. Note that since Applicant claim 20 are anticipated by Patent claim 14 and since anticipation is the epitome of obviousness the Application claim 20 are obvious over Patent claim 14.

Claim 23 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 9 of U.S. Patent No. 6,663,342. Although the conflicting claims are not identical, they are not patentably distinct from each other. Claim 9 of the patent "anticipates" application claim 23. Accordingly, application claim 23 is not patentably distinct from patent claim 9. Here, patent claim 9 requires a composite heat-dissipating system comprising: at least one fan guard respectively having a frame and a set of guard blades arranged inside said frame and fixed onto an inner surface of said frame; and at least one heat-dissipating device respectively having a first rotor device with a plurality of rotor blades; wherein said guard blades are arranged relative to said rotor blades of said at least one heat-dissipating device to supercharge an airflow out of said at least one heat-dissipating device; and said at least one fan guard and said at least one heat-dissipating device are connected in series; wherein one pair of said at least one fan guard and said at least one heat-dissipating device are connected in series and assembled with another pair of said at least one fan guard and said at least one heat-dissipating device in parallel.

Application claim 23 only requires A composite heat-dissipating system comprising: at least one fan guard respectively having a frame and a set of guard blades arranged inside said frame and fixed onto an inner surface of said frame; and at least one heat-dissipating device respectively having a first rotor device with a plurality of rotor blades; wherein said guard blades

Art Unit: 3745

are arranged relative to said rotor blades of said at least one heat-dissipating device to supercharge an airflow out of said at least one heat-dissipating device; wherein one pair of said at least one fan guard and said at least one heat-dissipating device are connected in series and assembled with another pair of said at least one fan guard and said at least one heat-dissipating device in parallel.

Thus it is apparent that the more specific patent claim 9 encompasses application claim 23. Following the rationale in *In re Goodman* cited in the preceding paragraph, where applicant has once been granted a patent containing a claim for the generic or broader invention without first submitting an appropriate terminal disclaimer. Note that since Applicant claim 23 are anticipated by Patent claim 9 and since anticipation is the epitome of obviousness the Application claim 23 are obvious over Patent claim 9.

Claim Rejections - 35 USC § 102

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-22 rejected under 35 U.S.C. 102(e) as being anticipated by Chang (US 6,244,818). Chang discloses a fan guard 50 adapted to be used with at least one heat-dissipating device 52 with a plurality of rotor blades 523 for super charging the airflow discharged from the heat-dissipating device (See Abstract) comprising a frame 501 with which it is integrally formed and a set guard blades 503 arranged inside and fixed onto the inner surface of the frame, wherein the guard blades are arranged relative to the rotor blades to supercharge the airflow out of the heat-dissipating device. The guard blades can be disposed on the outlet side or the inlet side of

Art Unit: 3745

the heat- dissipating device (Column 2, lines 5-16) and are of a shape such as a plate or essential the same shape as the rotor blades (column 4, lines 54-58).

Chang further discloses various embodiments of guard blade and heat-dissipating device sets such as a set of guard blades disposed on both the inlet side and the outlet side of the heat-dissipating device (see Figure 7) and a first and second rotor device supported within a frame 521/511 and guard blades mounted between the first and second rotor device to supercharge the airflow (Figure 5A).

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

CONCLUSION

Prior Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Horng et al. (6,547,540) show a supercharging structure for a fan comprising a fan guard 2 and a heat-dissipating device 3 mounted together in a frame 1. Horng et al. further show a structure having multiple fan and fan guards mounted in parallel (See Figure 14).

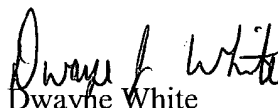
Art Unit: 3745

Contact Information


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dwayne J White whose telephone number is (703) 306-3464. The examiner can normally be reached on 7:30 am to 5 pm T-F and alternate Mondays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Look can be reached on (703) 308-1044. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Dwayne White
Patent Examiner
Art Unit 3745

DJW


EDWARD K. LOOK
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700

7/26/04